ReptiLe incubator

PX-20RD

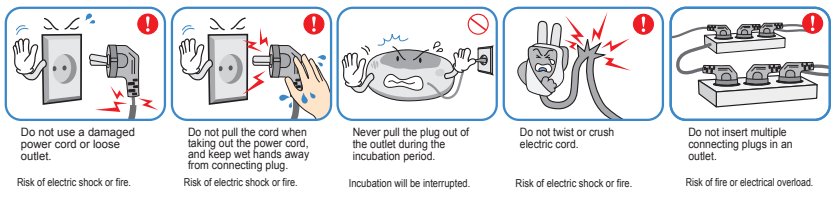
R·com Digital Incubator

www.R-com.co.kr

USER'S MANUAL (Professional)

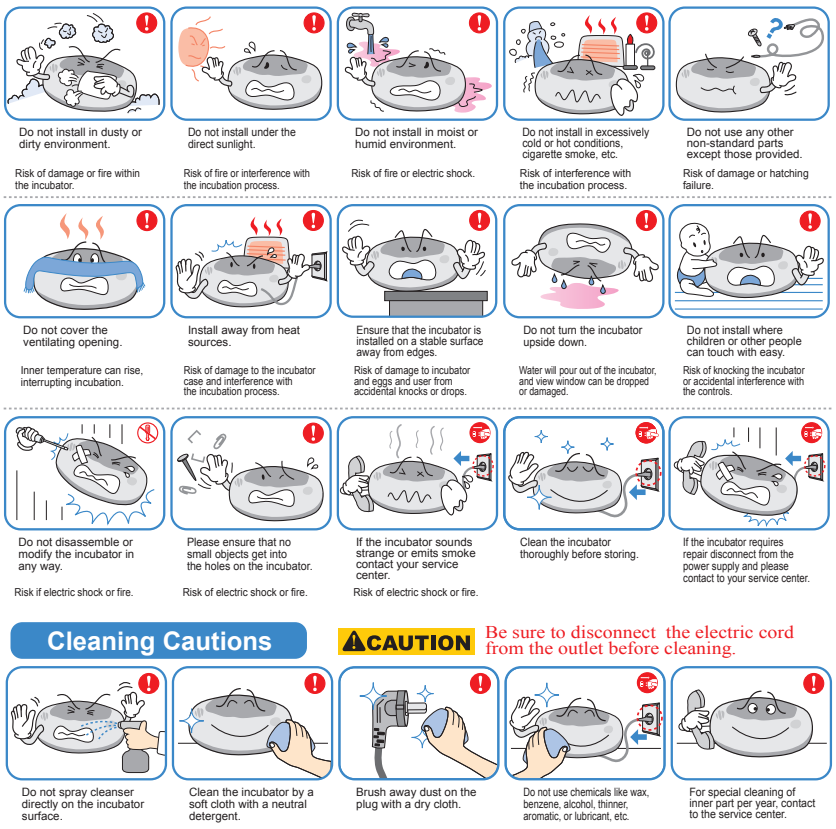
1. Safety Cautions

Electrical hazards — ⚠CAUTION Be careful the details below when you use.



Do not use a damaged power cord or loose outlet.	Do not pull the cord when taking out the power cord, and keep wet hands away from connecting plug.	Never pull the plug out of the outlet during the incubation period.	Do not twist or crush electric cord.	Do not insert multiple connecting plugs in an outlet.
Risk of electric shock or fire.	Risk of electric shock or fire.	Incubation will be interrupted.	Risk of electric shock or fire.	Risk of fire or electrical overload.

Setting Cautions — ⚠CAUTION Be careful the details below when you use.

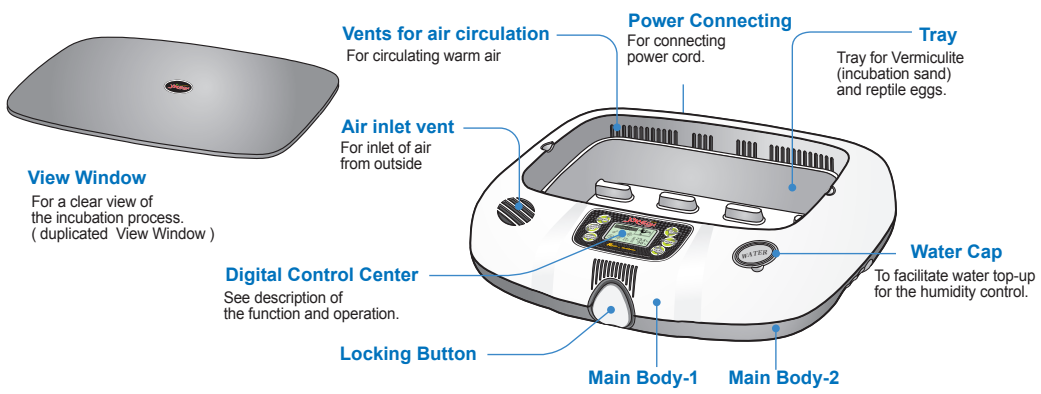


Do not install in dusty or dirty environment.	Do not install under the direct sunlight.	Do not install in moist or humid environment.	Do not install in excessively cold or hot conditions, cigarette smoke, etc.	Do not use any other non-standard parts except those provided.
Risk of damage or fire within the incubator.	Risk of fire or interference with the incubation process.	Risk of fire or electric shock.	Risk of interference with the incubation process.	Risk of damage or hatching failure.
Do not cover the ventilating opening.	Install away from heat sources.	Ensure that the incubator is installed on a stable surface away from edges.	Do not turn the incubator upside down.	Do not install where children or other people can touch with easy.
Inner temperature can rise, interrupting incubation.	Risk of damage to the incubator case and interference with the incubation process.	Risk of damage to incubator and eggs and user from accidental knocks or drops.	Water will pour out of the incubator, and view window can be dropped or damaged.	Risk of knocking the incubator or accidental interference with the controls.
Do not disassemble or modify the incubator in any way.	Please ensure that no small objects get into the holes on the incubator.	If the incubator sounds strange or emits smoke contact your service center.	Clean the incubator thoroughly before storing.	If the incubator requires repair disconnect from the power supply and please contact to your service center.
Risk if electric shock or fire.	Risk of electric shock or fire.	Risk of electric shock or fire.		

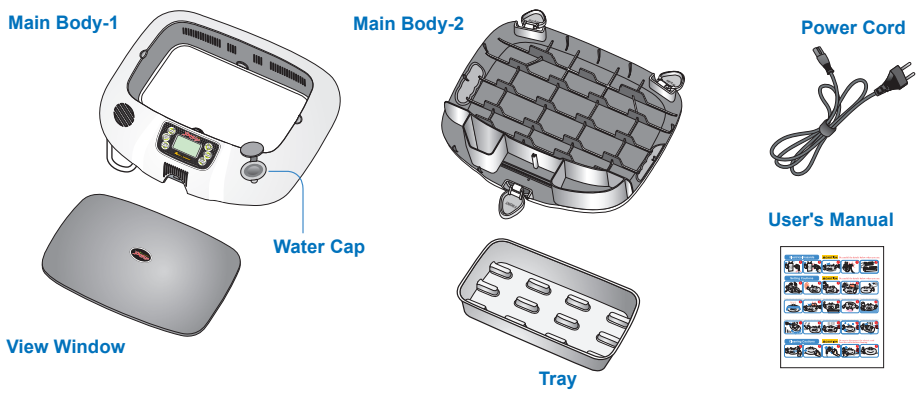
Cleaning Cautions — ⚠CAUTION Be sure to disconnect the electric cord from the outlet before cleaning.

Do not spray cleanser directly on the incubator surface.	Clean the incubator by a soft cloth with a neutral detergent.	Brush away dust on the plug with a dry cloth.	Do not use chemicals like wax, benzene, alcohol, thinner, aromatic, or lubricant, etc.	For special cleaning of inner part per year, contact to the service center.

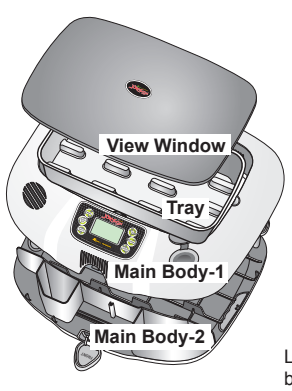
2. Identification of Parts

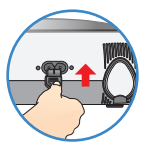

Vents for air circulation
For circulating warm air
Power Connecting
For connecting power cord.
Tray
Tray for Vermiculite (incubation sand) and reptile eggs.
Air inlet vent
For inlet of air from outside
View Window
For a clear view of the incubation process. (duplicated View Window)
Water Cap
To facilitate water top-up for the humidity control.
Digital Control Center
See description of the function and operation.
Locking Button
Main Body-1
Main Body-2

3. Basic Components



4. How to Assemble



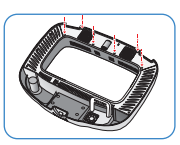


Insert the power cord in the socket at the back of the main body.

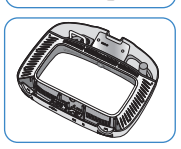
Lock the three locking buttons at the front and rear of the incubator.

5. How to Replace Fuse

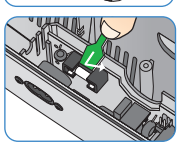
▶ When the machine failed to power on even if you pluged in, remove the fixing piece like the picture by screwdriver.



▶ You can find assembled PCB when open the cover. Remove faulty fuse with screwdriver.



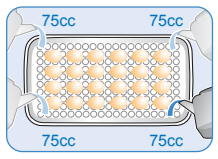
▶ Replace with new fuse. (250V 2.0A ∅5*20mm)



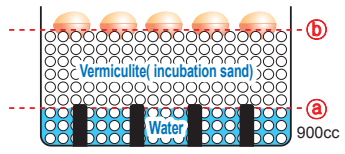
6. Before use

Environment conditions of the incubation room for the installation of reptile incubator.
(Temp.: 22~25℃ / Humidity: 30~50%)

If the incubation room temperature does not meet the required temperature, it can not be controlled automatically with the set incubation conditions. Room temperature should be about 4℃ lower than incubator setting temperature.



[Figure - 6]



[Figure - 1]

▶ In case of low humidity incubation (70% ~ 85%) Fill the vermiculite(incubation sand) which is to be purchased separately into the small incubating tray as shown in [Fig.- 1] ⓑ.

▶ In case of high humidity incubation (90% or more) In case the incubating environment is to be maintained 90% or higher in humidity, fill the small incubating tray with 900cc of water as shown in [Fig.- 1]ⓐ and put the vermiculite into it as shown in [Fig.- 1]ⓑ before mixing them. That would facilitate the control of high humidity and remove the need of water filling.

1. Before starting incubation, fill water into the water tankⓒ,ⓓ of main body-2 as [Fig.-2] for humidification.

⚠ Remove water from the tank before moving the incubator. Otherwise the incubator can be out of order.

2. Humidification heater part [Fig.-5] of the main body-1 should be soaked inside of water tank when assembling with main body-2. Be sure to check this, and cover the view window for connecting power cord.

▶ If you are going to incubate without water in the incubator, you should turn off humidification function. (Refer to How to turn off Humidification Function)

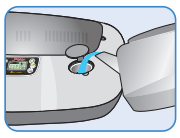
Tip Do not apply force or shock to heater on the upper part of the body. It may be the cause of failure. Some foreign body can be stick to the heater part after hatching, but there is no problem. (Refer to the "How to Clean)

3. After setting the incubation environment of the egg, install tray inside of the incubator and operate it for 30 to 40 minutes and put eggs into the tray.

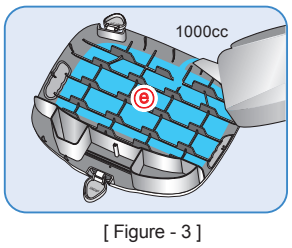
4. Bury a low half of the eggs into the Vermiculite as[Fig.-1] and fix them. (Check the conditions of the eggs once a week. Remove unfertilized eggs, incompletely developed eggs, eggs covered with mold.)

5. Check the water for humidification everyday and fill it up as shown in Fig - 4. Stop supply of the water when styrofoam ball floats.

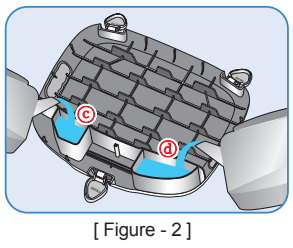
⚠ Do not reuse Vermiculite(incubation sand) after hatch.



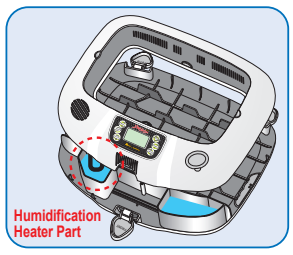
[Figure - 4]



[Figure - 3]



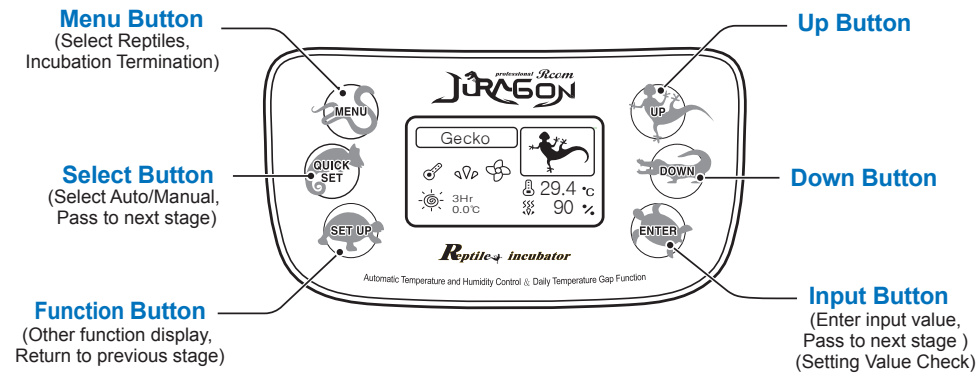
[Figure - 2]



[Figure - 5]

If the incubation room is not properly controlled for high humidity (90~95%), pour 75cc of water into four edges of the tray. (See Fig. - 6) And, pour 1000cc of water at the main body-2. [Fig.- 3]

7. Operation Part



8. Display Part Explanation

	ICON	NAME AND FUNCTION
1	Gecko	Species of Reptiles
2		Heater Stop Display Heater Operation Display
3		Humidification Stop Display Humidification Operation Display
4		Power Failure Notification
5		Daily Temperature Gap Operation Display

	ICON	NAME AND FUNCTION
6	Others, Chameleon, Snake, Tortoise, Alligator, Turtle, Gecko	Reptile Icon Display
7		FAN Operation Display
8	3Hr 0.0℃	Daily Temperature Gap Setting Value Display
9	26.1℃	Current Temperature Display Temperature Abnormal Display
10	40 % OFF	Current Humidity Display Humidification function OFF

9. SET UP(Other Functions)

T.CAL Temperature Calibration		⚠ WARNING Fatal Damage with Incorrect Calibration! ⚠ Be sure to read CAUTIONS. (Calibration available after 5 Sec.) Temp. calibration limits : -9.9℃ ~ +9.9℃
H.CAL Humidity Calibration		⚠ WARNING Fatal Damage with Incorrect Calibration! ⚠ Be sure to read CAUTIONS. (Calibration available after 5 Sec.) Humidity calibration limits : -20% ~ +20%
ALARM Abnomal High Alarm	High Temp HiErr	Alarm sounds when incubator temp. is higher than setting value because of room temp. change or heating system disorder * Setting Range : 0.0℃~5.0℃ (Default Setting : 0.0℃)
ALARM Abnomal low Alarm	Low Temp LoErr	Alarm sounds when incubator temp. is lower than setting value because of room temp. change or heating system disorder * Setting Range : 0.0℃~5.0℃ (Default Setting : 0.0℃)
Unit		Selecting Centigrade (°C) and Fahrenheit (°F) * Default Value : Centigrade (°C)
Light		LCD Backlight management setting * Always On : Always BackLight On * Always Off : Always BackLight Off * Event On : 20 Sec. ON with Key input * Default Value : Always On
Sound		ON/OFF Setting for Melody, other alarms * Default Value : ON
ALL RESET Factory setting	ALL RESET	It returns to factory setting when you change the initial setting at discretion.
Info		Basic information of Incubator (versoin Indication)

Reptile incubator

Professional PX-20RD

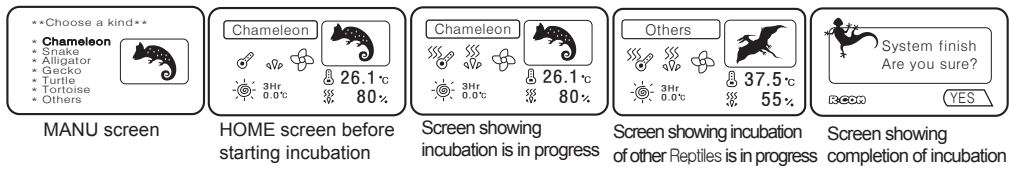
www.R-com.co.kr

10. Easy Function Operation

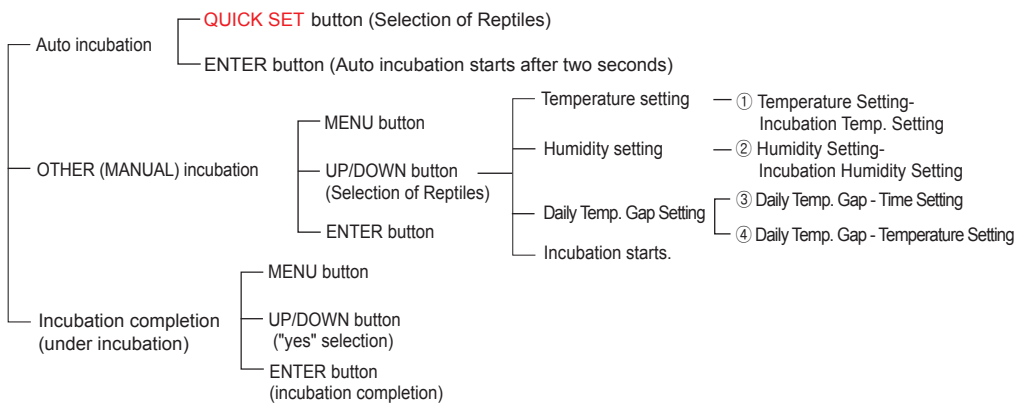
REFER TO "HOW TO START INCUBATION" FOR MORE INFORMATION.

Automatic Mode Incubation	QUICK SET ▶ Select the Species of Reptile ▶ ENTER (2 Sec.)
Other(Manual) Mode Incubation	MENU ▶ UP / DOWN Select the Species of Reptile ▶ ENTER ▶ Temp. Setting, Humid. Setting, Daily Temp. Gap Setting ▶ ENTER
How to change Setting under Incubation (QUICK SET)	QUICK SET ▶ Once: Temp. Setting, Twice: Humidity Setting, Three times: Daily Temp. Gap setting ▶ UP / DOWN ▶ ENTER
Incubation Termination	Screen on Incubation ▶ MENU ▶ System finish Are you sure? ▶ UP / DOWN Select YES ▶ ENTER
Incubator Initialization (Factory Setting)	SET UP BACK ▶ UP / DOWN "All Reset" ▶ ENTER ▶ ENTER
℃ ↔ ℉ How to change	SET UP BACK ▶ UP / DOWN ℃ / ℉ ▶ ENTER ▶ UP / DOWN ℃↔℉ ▶ ENTER
How to turn off Humidification Function (In case of low humidity incubation)	Screen on Incubation ▶ QUICK SET (2 times) ▶ DOWN (UNDER 40%) ▶ "OFF" ▶ ENTER

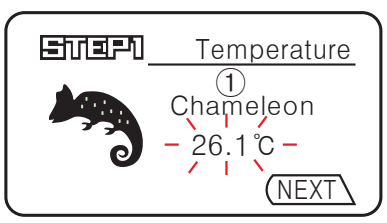
11. How to start incubation by Auto or Manual



MANU screen | HOME screen before starting incubation | Screen showing incubation is in progress | Screen showing incubation of other Reptiles is in progress | Screen showing completion of incubation


Auto incubation
QUICK SET button (Selection of Reptiles)
ENTER button (Auto incubation starts after two seconds)
OTHER (MANUAL) incubation
MENU button
UP/DOWN button (Selection of Reptiles)
ENTER button
Temperature setting
Humidity setting
Daily Temp. Gap Setting
Incubation starts.
① Temperature Setting- Incubation Temp. Setting
② Humidity Setting- Incubation Humidity Setting
③ Daily Temp. Gap - Time Setting
④ Daily Temp. Gap - Temperature Setting
Incubation completion (under incubation)
MENU button
UP/DOWN button ("yes" selection)
ENTER button (incubation completion)

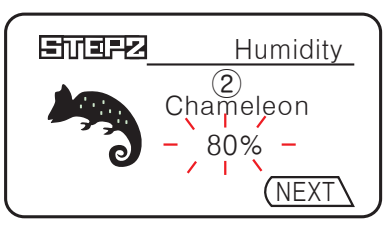
▶ Incubation environments such as temperature, humidity, egg rotation, etc. are automatically controlled in automatic mode. User only needs to select type of reptile. User can change incubation environment if it is necessary.



[Temperature setting screen]

STEP1 Temperature setting

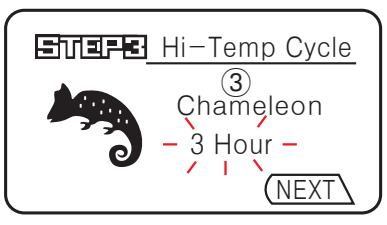
The reptile incubation temp ① on the menu screen is memorized in the micro chips. User can optionally change the incubation temperatures. (Initial settings: depending on types of reptiles.)



[Humidity setting screen]

STEP2 Humidity setting

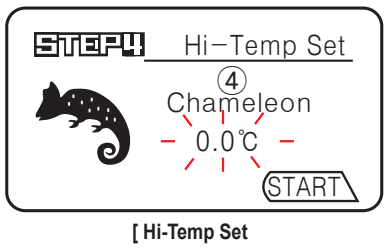
The reptile incubation Humidity ② on the menu screen is memorized in the micro chips. User can optionally change the incubation Humidity. (Initial settings: depending on types of reptiles.)



[Hi-Temp Cycle Daily Temp. Gap- Time Setting Screen]

STEP3 Daily Temp. Gap- Time Setting

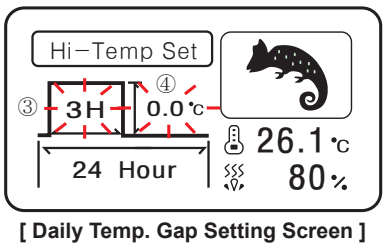
Daily Temp. Gap function ③ is to make the environment of incubator to be the hottest period in the day by user. User can input temperature and time to make the optimum environments for incubation of reptiles. (Initial settings: ③ three hours.)



[Hi-Temp Set Daily Temp. Gap- Temperature Setting Screen]

STEP4 Daily Temp. Gap- Temperature Setting

It increases the daytime temperature by set temperature ④ and the daytime period by set time ③ in the above STEP 3. In case of reptiles, it is quite often to set the temperature higher than the incubation temperature by 1.5℃. (Initial settings: depending on types of reptiles ④.) Eg.) In case of reptiles, their incubation temperature is 26.1℃. If the daytime period is set to three hours and daytime temperature to 1.5℃, the incubation temperature changes from 26.1℃ to 27.6℃ for three hours once a day.



[Daily Temp. Gap Setting Screen]

▶ QUICK SET **button:**

This button is used to reset the incubation environment (temperature, humidity, daytime temperature) during auto or manual incubation. If QUICK SET button is pressed, temperature window blinks in the incubation progressing screen. When changing temperature, set the temperature with up/down button and press enter button after resetting. It will be then stored and converted to incubation screen after five seconds.

If you do not want to change the incubation environment, press QUICK SET button to move to the next stage. This will be converted to incubation screen after five seconds.

▶ You shift to next mode with pressing QUICK SET button 1 to 4 times.
You can also use it when you want to check incubation conditions under incubation.

▶ **Auto Incubation:**

Optimum incubation conditions for the species of reptiles are memorized in micro chip.
With this function, you can easily operate this incubator.
Select the species of reptile at MENU screen with QUICK SET button,
and press ENTER button for about 2 sec. for starting incubation.

▶ **Other (Manual) Incubation:**

Other (Manual) incubation is for incubating the species of reptiles which is not memorized in the incubator.
User can set the incubation condition according to their needs. (LCD Display will indicate as the graph above.)
Press MENU button at basic screen, and select "Others" with UP/DOWN button, and then ENTER button.
Set the temperature, humidity, and daily temperature gap as your needs and press ENTER button.

▶ **What is Daily Temperature Gap Function?**

This function is for making the incubation condition same with natural conditions.
It creats the highest temperature time zone by sun in nature artificially.
This function helps the hatching rate raise with optimum incubation conditions by the user directly set the proper temperature and time.

12. How to turn off Humidification Function

▶ You can turn off humidification function when you don't fill water with your incubation or when you need low humidity incubaion under 40%.

▶ Press "QUICK SET" button twice, and ress DOWN button until OFF indicated at humidity setting. Then, press ENTER button. (OFF will show when the humidity is under 40%.)

13. How to Terminate Incubation

▶ If you press MENU button on incubation period, **" System finish Are you sure ? "** messgae will show.

▶ Select YES with UP / DOWN button, and then ENTER button.

If you leave the incubator alone without drying water after high humidity incubation, the water inside of incubator condense and make waterdrop at the LCD display or control device. For preventing this problem, disassemble main body 1 and 2, and dry completely before storing. (You can dry the incubator as operating the incubator for about 1 to 2 hours after removing water.)

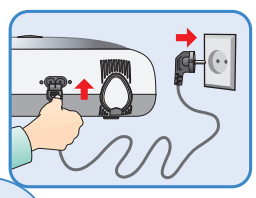
14. Incubator Initialization

(ALL RESET) For returning to the factory setting

▶ If you want to return to the initial set values, please follow this sequence.
1) Select All Reset at SET UP mode
2) Press Enter
3) Press OK

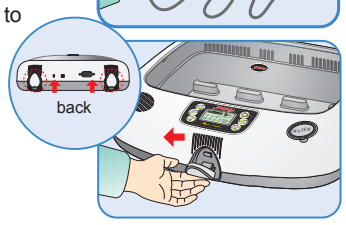
15. How to Clean after Hatching

▶ Pull out the electric cord from connecting jack, and also take out the plug from the outlet.



▶ Unlock three of locking buttons at the front and back of incubator, and disassemble the incubator.

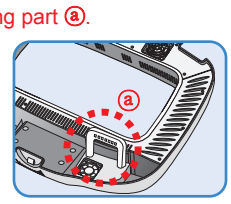
▶ Disassemble the incubator. The bottom part shall be thoroughly cleaned with water and dried.The upper parts shall be naturally dried in order to remove moisture inside of the incubator.
Assemble the parts in the reverse order of disassembly.

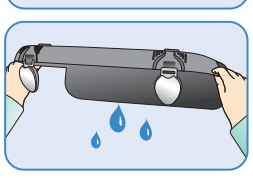


▶ In case of you operate humidification function, there can be moss on the humidification heating part ⓐ. It doesn't effect in function, and you just need to clean it with soft brush after hatching.

⚠ Do not inflict an impact to the humidification heating part ⓐ. Or, it will be damaged.

⚠ Do not clean the product with organic solvents such as benzene and paint thinner.





16. How to calibrate Temp.(Humidity)

CAUTIONS This calibration function is to reset the temperature and humidity of the incubator to correct values using your thermometer and hygrometer. It is better not to calibrate the incubator as normal thermometer and hygrometer are not reliable than incubator factory setting.

Tip How to calibrate : Fill vermiculite to three fourths of the internal tray. Fix temperature or hygrometer at 2 cm above the bottom of the tray and operate it for one hour before starting its calibration.

* Be sure to check ⚠ CAUTIONS before you calibrate temperature or humidity.

▶ After start incubation, press SET UP button and go to T.CAL on incubation process.
If you press ENTER here ' WARNING ' will show on LCD. It goes to calibration Mode automatically after 5 sec. Then, calibrate the temperature with UP/ DOWN button and press ENTER button for saving.
(How to calibrate Humidity : It is same with the way calibrating temperature on H.CAL)

17. Specification

Power	AC 100V~120V, 50/60Hz / AC 220V~240V, 50/60Hz	
Temp. limits	20℃ ~ 42℃ (68°F~107.6°F)	
Temp. Accuracy	± 0.5℃	
Working Temperature	Ideal : 22℃ ~ 25℃	Min. 20℃ / Max. 26℃
Humidity Limits	40% ~ 95% (It can be changed according to the conditions)	
Humidity Accuracy	± 5%	
Power Consumption	Average 48W	
Capacity	10~120 Eggs Available at once	
Net Weight	4.5 Kg	
Size	(W)500×(L)410×(H)160 (mm)	
Fuse Standard	250V 2.0A (Ø5×20mm)	

Visit our web site (www.r-com.co.kr) for more information on our products and other informations.
Update of information : download the necessary information from resource room in Rcom homepage.

R-com digital reptile incubator is designed for easy and convenient use.
For the improvement of the functions of the incubator, design, how to use, etc. can be changed without notice in advance.

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⚠ Hatching result can be changed by a large number of factors. Autoelex Co.,Ltd. will not be held responsible for loss of eggs or reptiles under any circumstances such as hatching failure, user's carelessness, power failure, or malfunction.